CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-157

NPDES NO. CA006068

WASTE DISCHARGE REQUIREMENTS FOR:

UNION OIL COMPANY OF CALIFORNIA
RICHMOND TERMINAL
RICHMOND, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereafter called the Board) finds that:

1. Union Oil Company of California, Richmond Terminal (hereinafter called the discharger), submitted an application dated September 10, 1984 and amended it by letters dated February 27, 1989 and March 30, 1989 for a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).

2. The discharger stores and distributes petroleum products and lubricating oils. The lubricants are blended and packaged on site.

3. The discharge consists of: Waste 001 - this waste consists of an average of 10,000 gallons per day of washdown from the product loading and storage areas, process wastewater from the warehouse area, tank water draws, and contaminated stormwater runoff and; Waste 002 -this waste consists of an undetermined amount of uncontaminated stormwater runoff from parking lot areas. Waste 001 is treated by an oil-water sump and skim pond, and then discharged to the Santa Fe Channel of Richmond Harbor, an arm of the San Francisco Bay, both waters of the United States. Waste 002 is also treated by an oil-water separator and also discharged to the Santa Fe Channel through a separate outfall.

4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The provisions of this permit are consistent with the revised Basin Plan.

5. The beneficial uses of Santa Fe Channel of Richmond Harbor and contiguous water bodies are:

   a. Water contact recreation
   b. Non-contact water recreation

c. Wildlife Habitat
d. Preservation of Rare and Endangered Species
e. Estuarine Habitat
f. Fish migration and spawning
g. Industrial service supply
h. Navigation
i. Commercial and Sport Fishing

6. Effluent limitations and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.

7. The Basin Plan prohibits the discharge of any wastewater which has particular characteristic of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of 10:1, or into any nontidal water or dead-end slough or similar confined waters, or its immediate tributaries.

8. The Basin Plan provides that exceptions to this discharge prohibition will be considered for discharges where:

   a. an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means, such as an alternative discharge site, a higher level of treatment, and/orimproved treatment reliability; or

   b. a discharge is approved as part of a reclamation project; or

   c. it can be demonstrated that net environmental benefits will be derived as a result of the discharge.

9. The Board grants an exception to the Basin Plan noted in Finding 7.a. above, on the condition that the discharger documents:

   a. an inordinate burden based on cost relative to beneficial uses protected to meet the initial 10:1 dilution or to connect to the sewer district; and

   b. that an equivalent level of environmental protection can be achieved by alternate means such as a higher level of treatment, and/or improved treatment reliability to ensure that:

      1) Waste 001 meets effluent limits prior to discharge.

      2) A Best Management Practice Plan (BMP) is provided which addresses the prevention of potential releases of pollutants or other materials deleterious to surface waters from areas tributaries to Waste 001 and Waste 002.

10. Effluent limitation guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency (EPA). Effluent limitations of this order are based on the Basin Plan, State Plans and Policies, and best professional judgement. The limitations are considered to be those attainable by BAT, in the judgement of the Board.

11. Under 40 CFR 122.44, "Establishing Limitations, Standards, and Other Permit Conditions," NPDES permits should also include toxic pollutant limitations if the discharger uses or manufactures a toxic pollutant as an intermediate or final product or byproduct. This permit may be modified prior to the expiration date, pursuant to 40 CFR 122.62 and 124.5, to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge.

12. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of all conservative toxic and deleterious substances above those levels which can be achieved by a program acceptable to the Board is prohibited.

B. Effluent Limitations

1. The discharge of Waste 001 containing constituents in excess of the following limits is prohibited:

Constituent	Units	Averages 30-day	Averages 7-day	Daily Maximum
a. Total Suspended Solids	mg/l	30	45	-
b. Oil & Grease	mg/l	10	-	20
c. Settleable Matter	ml/l-hr	0.1	-	0.2
d. Arsenic	ug/l			20
e. Cadmium	ug/l			10
f. Total Chromium	ug/l			11
g. Copper	ug/l			20
h. Lead	ug/l			5.6
i. Mercury	ug/l			1
j. Nickel	ug/l			7.1
k. Silver	ug/l			2.3
l. Zinc	ug/l			58

2. The discharge of Waste 001 shall not contain a Volatile Organic Compound (VOC) exceeding a daily max of 5 ug/l and Total Volatile Organic Compounds (VOCs) exceeding a daily max of 100 ug/l as measured by EPA Methods 601 and 602.

3. The discharge of Waste 001 shall not contain Total Petroleum Hydrocarbons (TPHs) exceeding a daily max of 50 ug/l as measured by Modified EPA Method 8015.

4. The pH of Waste 001 shall not exceed 8.5 nor be less than 6.5.

5. Waste 001 shall meet the following limit of toxicity:

   The survival of three-spine stickleback and rainbow trout (or fathead minnow) in a 96-hour static renewal bioassay of the effluent as discharged shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less tha 70% survival for ten consecutive samples.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the state at any place:

   a. Floating, suspended, or deposited macroscopic particulate

matter or foam;

b. Bottom deposits or aquatic growths;

c. Alteration of turbidity or apparent color beyond present natural background levels;

d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:

a. Dissolved oxygen:	5.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
b. Dissolved sulfide:	0.1 mg/l maximum.
c. pH:	The pH shall not be depressed below 6.5 nor above 8.5, nor caused to vary from ambient pH levels by more than 0.5 units.
d. Un-ionized Ammonia (as N):	0.025 mg/l Annual Median 0.16 mg/l Maximum at any time

3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance or pollution as defined in Section 13050 of the California Water Code.

2. The discharger shall comply with the limitations, prohibitions, and other provisions of this order immediately upon its adoption by the Board, except as provided below.

3. The discharger shall comply with effluent limitations B.1.d through B.1.l, B.2, and B.3, and B.5 by April 1, 1991. Compliance shall be achieved in accordance with the following time schedule:

   a. Submit documentation for Finding 9.a by October 20, 1989;

   b. Submit a report pursuant to Finding 9.b.1. by November 20, 1989. This report shall include sources of pollutants, treatment technologies and costs for compliance with effluent limitations.

   c. Submit a BMP plan to the Executive Officer by February 20, 1990. The BMP shall be consistent with the EPA regulations 40 CFR 125, Subpart K and the general guidance contained in the " NPDES Best Management Guidance Document", EPA Report No. 600/9-79-045, December 1979 (revised June 1981). The BMP shall specifically address segregation of non-contaminated stormwater from contaminated areas. A BMP program acceptable to the Executive Officer shall be implemented by May 20, 1990.

4. The discharger shall comply with the attached Self-Monitoring Program as adopted by the Board.

5. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements" dated December 1986.

6. The discharger shall review and update by November 1 each year its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.

7. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).

8. Pursuant to Environmental Protection Agency regulations [40CFR122.42(a)] the discharger must notify the Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR 122.42(a).

9. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(c), and (d), 303, 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

   (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or,

   (b) Controls any pollutant not limited in the permit.

   The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

10. This Order expires on August 16, 1994 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

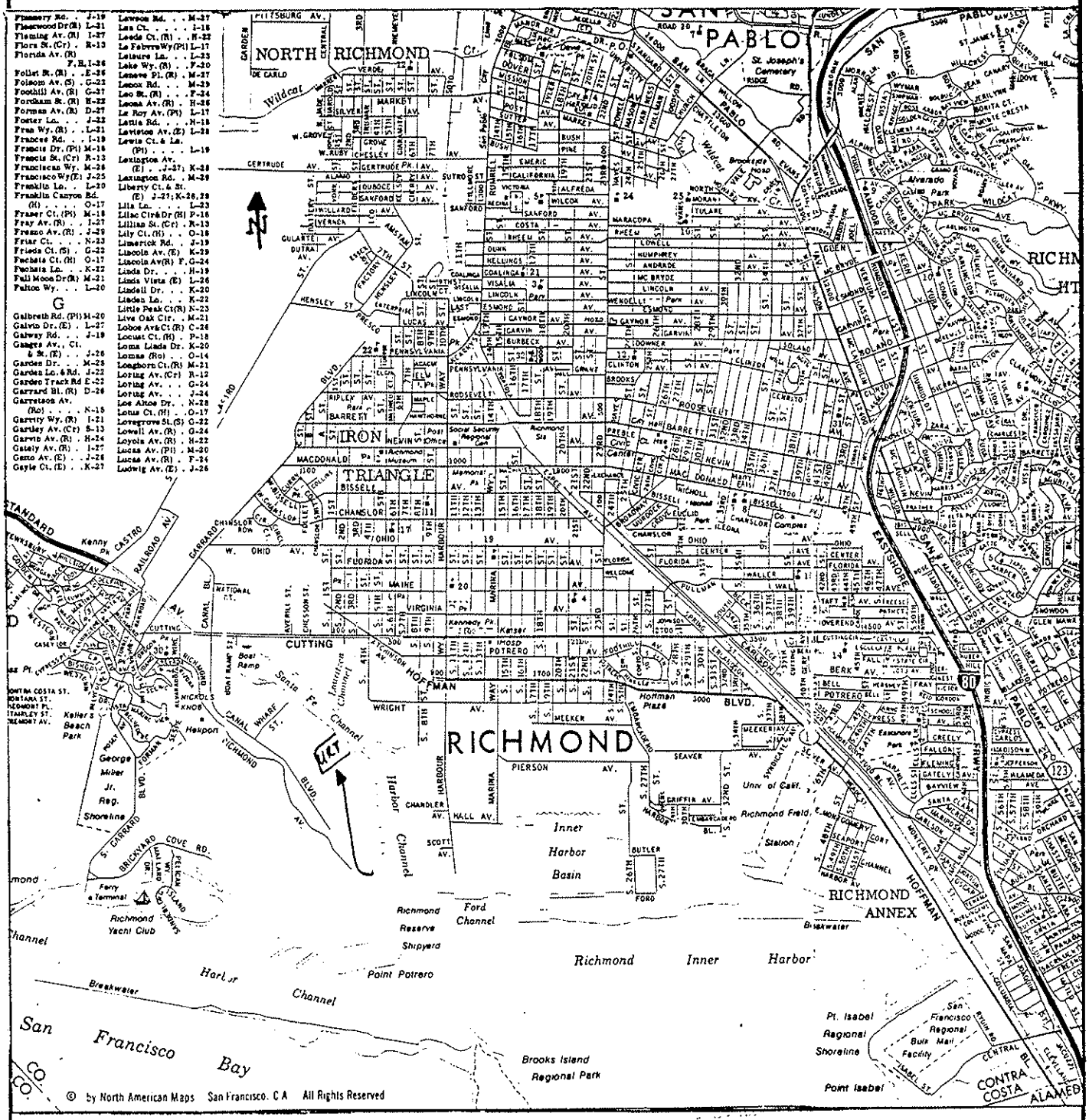
11. This Order shall serve as a National Pollutant Discharge Elimination pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing, provided the Regional Administration, U.S. Environmental Protection Agency, has no objections.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 16, 1989.

STEVEN R. RITCHIE
Executive Officer

Attachments:

Location Map
Standard Provisions and Reporting Requirements dated December 1986
Resolution No. 74-10
Self-Monitoring Program



STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

UNOCAL RICHMOND TERMINAL
(URT)

DRAWN BY: LAH	DATE: 6/30/89	DRWG. NO.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

TENTATIVE

SELF-MONITORING PROGRAM

FOR

UNION OIL COMPANY OF CALIFORNIA

RICHMOND TERMINAL

RICHMOND, CONTRA COSTA COUNTY

NPDES NO. CA0006068

ORDER NO. 89-157

CONSISTS OF

PART A (DATED 12/86)

AND

PART B

SELF-MONITORING PROGRAM

PART B

DESCRIPTION OF SAMPLING STATIONS
AND
SCHEDULE OF SAMPLING, ANALYSIS & OBSERVATIONS

I. Sampling Station Location/Description

A. EFFLUENT

Station	Description
E-001	At any point in the outfall from the plant facilities between the point of discharge to Santa Fe Channel and the point at which all wastes tributary to that outfall are present.
E-002	At any point in the outfall from the plant facilities between the point of discharge to Santa Fe Channel and the point at which all wastes tributary to that outfall are present.

II. SCHEDULE OF SAMPLING, ANALYSIS & OBSERVATTIONS

A. The schedule of sampling and analysis shall be that given in Table 1 (attached).

B. Sample collection, storage, and analysis shall be performed according to the latest 40 CFR Part 136 or other methods approved and specified by the Board.

III. MISCELLANEOUS REPORTING

A. The discharger shall retain and submit (when required) the following information concerning the monitoring program for organic and metallic pollutants.

a. Description of sample stations, times, and procedures.

b. Description of sample containers, storage, and holding time prior to analysis.

c. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal and surrogate standards.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established by this Board.

2. Is effective on the date shown below.

3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions may be ordered by the Executive Officer or Regional Board.

STEVEN R. RITCHIE
Executive Officer

9/20/89
Effective Date

Attachments:
Table 1

TABLE I

SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

Station	Constituent	Unit	Type of Sample	Frequency of Analysis
E-001	Flow	gpd	continuous	continuous
	Oil & Grease	mg/l kg/day	grab (1)	weekly
	TSS	mg/l	24-hour-composite	weekly
	pH	pH units	grab	weekly
	settleable solids	ml/l-hr	grab	monthly
	Arsenic Cadmium Chromium Copper Silver Lead Mercury Nickel Zinc	ug/l kg/day	24-hour composite	monthly
	Toxicity	% survival	(2)	quarterly
	Benzene (3) Chlorobenzene 1,2-Dichloro-benzene 1,3-Dichloro-benzene 1,4-Dichloro-benzene Ethylbenzene Toluene	ug/l	grab	monthly

Station	Constituent	Unit	Type of Sample	Frequency of Analysis
E-001	Xylene	ug/l	grab	monthly
	Purgeable Halocarbons	ug/l	grab	monthly
	(4) Total Petroleum Hydrocarbons	ug/l	grab	monthly
	All Applicable Standard Observations			monthly
E-002	Oil & Grease	mg/l	(1) grab	monthly

LEGEND

FREQUENCY OF ANALYSIS

Continuous= Continuous measurement during discharge. The flow rate should be reported on a daily basis in the self-monitoring report.
Weekly= once each week
Monthly= once each month

FOOTNOTE

1) Oil & Grease sampling shall consist of 3 grab samples taken at 2-hour intervals during the sampling day, with each grab being collected in a glass container. The entire volume of each sample shall be composited prior to analysis. Each glass container used for sample collection or mixing shall be thoroughly rinsed with solvent rinsings as soon as possible after use, and the solvent rinsings shall be added to the composite wastewater sample for extraction and analysis.

2) The bioassay test shall be a static-renewal test using two test fish species (stickleback, and rainbow trout or fathead minnow).

3) These parameters shall be analyzed using EPA Method 601 and 602 for purgeable halocarbons and for volatile aromatics, respectively.

4) These parameters shall be anlayzed using Modified EPA Method 8015 (this method is modified depending on the type of fuel handled at the facility).